## Index of Claims

Application N . Applicant(s)

| 10 / 60 | N | Applicant(s)

| Examiner | Art Unit |

Rejected

Allowed

(Through numeral)
Cancelled
+ Restricted

Non-Elected
I Interference

A Appeal
O Objected

|            | alar T   | 0.11   |          |            |              |          |              |          |  |           | C1.      | Ciri     |          |  |                    |          |          |                         |   |          | aim      | Data T     |          |                      |          |          |          |              |   |          |  |
|------------|----------|--|----------|------------|--------------|----------|--------------|----------|--|-----------|----------|----------|----------|--|--------------------|----------|----------|-------------------------|---|----------|----------|------------|----------|----------------------|----------|----------|----------|--------------|---|----------|--|
| <u>Cla</u> | aim _    | Н  | Date     |            |              |          |              |          |  |           |          | Claim    |          |  | Date               |          |          |                         |   |          |          | Claim      |          |                      | Date     |          |          |              |   |          |  |
| Finai      | Original | 8/12/03  |          |            |              |          |              |          |  |           | Final    | Original |          |  |                    |          |          |                         |   |          | Final    | Original   |          |                      |          |          |          |              | -   |          |  |
| <u> </u>   | 1        |  | Н        | ┪          | 一            | -        | $\neg$       | $\dashv$ | $\vdash$   | $\dashv$  |          | 51       | Н        | Н  | +                  | +        | +        | +                       | ╁   | H        | <b>—</b> | 101        | $\Box$   | ╅                    | +        | 7        | +        | 1            | +   | +-       |  |
| $\vdash$   | 2        | H  | Н        | -          | -            |          | $\neg$       |          |  | -         | <b>—</b> | 52       |          | $\dashv$   | 7                  | +        | 十        | +-                      | 1   | H        |          | 102        | $\Box$   | T                    | T        | 7        | +        | 1            | 十   | 1        |  |
|            | 3        | $\vdash$   | Н        | 7          | ╗            | $\Box$   | $\neg$       | $\neg$   |  | $\neg$    | 1        | 53       |          |  | $\dashv$           | 7        | 7        | 十                       | $\top$  | $\Box$   |          | 103        |          | _                    | 7        | 十        | _        | 1            | 十   | 1        |  |
|            | 4        |  |          | $\neg$     | 7            |          |              |          |  | $\neg$    |          | 54       |          | П  |                    | 寸        | $\top$   | $\neg$                  | T   | П        |          | 104        |          |                      |          |          |          | Т            | T   | $\top$   |  |
|            | 5        | $\overline{}$                                    |          | $\neg$     | 7            |          |              |          | $\Box$   |           |          | 55       |          |  |                    | T        |          |                         | T   |          |          | 105        |          | $\top$               |          | I        | $\top$   | T            | I   | $\perp$  |  |
|            | 6        |  | П        |            |              |          |              |          |  |           |          | 56       |          |  |                    |          | T        |                         | $\perp$   |          | <u> </u> | 106        |          |                      |          | $\perp$  |          |              | $\perp$   |          |  |
|            | 7        |  |          |            |              |          |              |          |  |           |          | 57       |          |  |                    |          | $\Box$   | $\perp$                 |   |          |          | 107        |          |                      | $\perp$  | $\perp$  |          |              | $\perp$   |          |  |
|            | 8        |  |          | $\Box$     |              |          |              |          |  |           |          | 58       | Ш        | П  | $\dashv$           | _        |          | $\perp$                 |   | Ш        | <u> </u> | 108        | $\sqcup$ | 4                    | 4        | 4        | _        | 4            | ㅗ   | $\bot$   |  |
|            | 9        |  |          |            | _            | Ц        |              |          |  | _         | <u></u>  | 59       |          | Ц  | _                  | 4        | 4        |                         | 1   | Ш        |          | 109        | Н        | 4                    | 4        | 4        | _        | _            | ┶   | +        |  |
|            | 10       |  |          | _          | _            |          |              |          |  | 4         |          | 60       |          | Ш  |                    | 4        | 4        | _                       | 4   | 1-1      | <u> </u> | 110        |          | 4                    | 4        | 4        | 4        | +            | +   | 4        |  |
| <u> </u>   | 11       | _  | Щ        | _          | _            | Щ        | ш            | Ш        |  | _         | <u> </u> | 61       | -        | Щ  | _                  | 4        | 4        | _                       | +   | $\vdash$ | <b>⊢</b> | 111        | ┝╌┤      | +                    | +        | +        | +        | +            | 4-  | ┽—       |  |
| <u> </u>   | 12       |  | Ш        | 4          | _            | $\vdash$ | Ш            | $\vdash$ | Щ  | _         |          | 62       | Н        | Щ  | -+                 | +        | +        | +                       | +-  | +        | <u> </u> | 112        | ⊢┤       | -+                   | +        | +        |          |              | +   |          |  |
| <b></b>    | 13       | <u> </u>   | Н        | {          | 4            | $\dashv$ | Н            | Н        | Ш  | $\dashv$  |          | 63       | -        | $\vdash \vdash$                                  |                    | -+       | +        | +                       | +   | +        | -        | 113<br>114 | ┝╌┤      | +                    | +        | +        | +        | ┿            | ┿   | +        |  |
| <u> </u>   | 14       | -  | Н        |            | $\dashv$     | Н        |              | Н        | Н  | $\dashv$  | -        | 64<br>65 | H        | $\vdash$   |                    | -+       | -+       | +                       | +-  | +        |          | 115        | Н        | +                    | ╅        | +        | +        | 十            | +   | +        |  |
| <b>—</b>   | 15<br>16 | -  | Н        | $\dashv$   | $\dashv$     | Н        | Н            | Н        | Н  | $\dashv$  | -        | 66       | $\vdash$ | ├┤   |                    | $\dashv$ | +        | +                       | +   | +        | $\vdash$ | 116        | H        | ┪                    | ╅        | +        | +        | +            | +   | +-       |  |
| $\vdash$   | 17       | -  | Н        | ┥          | -            | Н        | Н            | Н        | Н  | -         | -        | 67       | ╌        | Н  | ┪                  | ┪        | +        | +                       | +   | +-1      | $\vdash$ | 117        |          | $\dashv$             | +        | +        | +        | +            | 十   | +-       |  |
| ┢          | 18       | 7  | Н        |            | _            | Н        | Н            | Н        | Н  | $\dashv$  | -        | 68       | -        | Н  | $\dashv$           | +        | +        | +                       | ╈   | +-1      | <b></b>  | 118        | $\Box$   | 十                    | 十        | 十        | _        | +            | +   | +        |  |
| <b> </b>   | 19       | -  | Н        | $\dashv$   | $\dashv$     | Н        |              |          | Н  | $\dashv$  | $\vdash$ | 69       |          | Н  | _                  | 7        | +        | +                       | +-  | H        |          | 119        | П        | 7                    | +        | +        | 十        | 十            | 十   | +-       |  |
| <b>-</b>   | 20       | $\vdash$   | Н        | -          | -            | Н        | Н            | П        | Н  | $\dashv$  |          | 70       | Н        | Н  |                    | 寸        | _        | +                       | $\top$  | П        | _        | 120        | П        | ヿ                    | $\dashv$ | 1        | 7        | $\top$       | T   | $\top$   |  |
| ┢─         | 21       |  | Н        | $\dashv$   |              | М        |              | П        | Н  | $\dashv$  |          | 71       |          | П  |                    | _        | 1        | $\top$                  | ╅   | 11       |          | 121        |          | $\neg$               | 1        | 1        | 1        | $\top$       | 7   | $\neg$   |  |
|            | 22       | Т  | П        |            |              |          |              | П        |  | $\neg$    |          | 72       | 1        |  |                    | 7        | ┪        | $\top$                  | 1   | $\Box$   |          | 122        | П        | T                    | Т        | Т        |          | T            | T   | $\top$   |  |
|            | 23       | :  | М        | $\neg$     |              |          |              |          |  |           | $\vdash$ | 73       | Г        |  |                    | 寸        | T        |                         | $\top$  |          |          | 123        |          |                      | T        | $\Box$   | $\Box$   |              | $\perp$   | $\bot$   |  |
|            | 24       |  |          |            |              |          |              |          |  |           |          | 74       |          | ·  | $\Box$             | $\Box$   |          |                         |   |          |          | 124        |          |                      |          |          |          |              | ᆚ   | $\bot$   |  |
|            | 25       |  |          |            |              |          |              |          |  |           |          | 75       |          |  |                    |          |          | $\perp$                 |   | Ш        |          | 125        | Ш        | _ _                  | 4        | 4        | 4        | _            | 4   | $\bot$   |  |
|            | 26       |  |          |            |              |          |              |          |  |           |          | 76       | L        |  |                    |          | _        |                         |   | $\perp$  | <u> </u> | 126        | Н        | 4                    | 4        | 4        | 4        | 4            | 4   | ┷        |  |
|            | 27       | L  | Ц        |            | $\Box$       | Ш        | _            | <u> </u> | Щ  | _         | <u> </u> | 77       | L        | Ш  | Ш                  |          | 4        | 4                       | 4-  | Н        | $\vdash$ | 127        |          | -1                   | +        | +        |          | +            | +   | +        |  |
| <u></u>    | 28       | L  |          |            |              | Ш        | ш            | Ш        | Ц  |           | ļ        | 78       | <u> </u> | <b> </b>   | Н                  | -        | -+       | +                       | +   | 4-1      |          | 128        | ┨        | -+                   | +        | +        | +        |              | +   | ┼        |  |
| <u></u>    | 29       | ┡  | Щ        |            |              | Н        | _            | Н        | Н  | $\dashv$  | <b> </b> | 79       | 1-       |  | $\Box$             | -        | -+       | +                       | +   | +        |          | 129<br>130 | ┨        | $\dashv$             | +        | +        | +        | +            | +   | +-       |  |
|            | 30       | ┞-   | _        |            | _            | Щ        | Ш            | _        | _  | $\dashv$  | <u> </u> | 80       | ┢        | -  | Н                  | -        | -        | +                       | +   | +        | -        | 131        | ╁╌┨      | $\dashv$             | +        | +        | +        |              | +   | ┿        |  |
| <u> </u>   | 31       | <del> </del> —                                   | $\vdash$ | Н          | _            | Н        | H            | -        | H  | H         | -        | 81<br>82 | ⊢        | -  | $\vdash$           |          | -        | +                       | ╁   | +-       | -        | 132        | Н        | $\dashv$             | -+       | +        | $\dashv$ | +            | +   | +-       |  |
| -          | 32       | -  | $\vdash$ | -          | -            | -        | <b> </b> -   | -        | -  | $\dashv$  | $\vdash$ | 83       | ╫┈       | $\vdash$   | Н                  |          | $\dashv$ | ╁                       | +-  | ++       | -        | 133        |          | $\dashv$             | ╅        | ╅        | +        | +            | 十   |          |  |
| -          | 34       | ╂—   | $\vdash$ | Н          |              | Н        | $\vdash$     | $\vdash$ |  | H         | -        | 84       | ╁        | <del>                                     </del> | Н                  |          | -        |                         | +   | +-1      | -        | 134        | ╁╌┤      | $\dashv$             | +        | +        | $\dashv$ | +            | 十   |          |  |
| $\vdash$   | 35       | ╁╌   | Н        | Н          | -            | Н        | ╁            |          | $\vdash$   | H         | -        | 85       | 十        | 1  | Н                  | $\dashv$ | -1       | -                       | +   | H        |          | 135        | М        |                      | 7        | 7        | 7        | 1            | 十   | 1        |  |
| -          | 36       | H  | ╁╌       | $\vdash$   | _            | -        | ┢            |          | <del>                                     </del> | $\vdash$  |          | 86       | ✝        | П  | Н                  | -        | 7        | 十                       | +-  | H        |          | 136        | П        | 1                    | ✝        | 7        | 1        | 十            | T   | $\neg$   |  |
| -          | 37       | <del>                                     </del> | t        | Н          |              | Н        | $\vdash$     | ┪        | t  | H         | -        | 87       | †        | Т  | H                  | -1       | 7        | $\top$                  | _   | +        |          | 137        | П        |                      | _†       | 寸        | _†       | 丁            |   | 丁        |  |
| $\vdash$   | 38       | 1-   | 1        | Н          | _            | 1        | Т            | T        |  | $\square$ |          | 88       | 1        | Г  | П                  | 7        | ┪        | 1                       | 丁   |          |          | 138        | П        |                      | 丁        |          | $\Box$   | $oxed{\Box}$ | floor   |          |  |
| <b>—</b>   | 39       | 1  | 1        | П          | П            | П        | T            | Т        |  | П         |          | 89       | Τ        |  |                    |          |          | $\top$                  | J   |          |          | 139        |          |                      | $\Box$   | J        | $\Box$   | $\Box$       | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $\perp$  |  |
|            | 40       | 1  | 1        |            |              | 1        |              |          |  |           |          | 90       |          |  |                    |          |          |                         | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ |          |          | 140        |          | $\square$            | $\Box$   | J        | $\Box$   | $\bot$       | $\perp$   | $\bot$   |  |
| $\Box$     | 41       | Т  |          |            |              |          |              |          |  |           |          | 91       |          | L  |                    |          |          | $oldsymbol{\mathbb{I}}$ |   | $\Box$   |          | 141        |          |                      | ┙        | $\perp$  |          | 4            | 4   |          |  |
|            | 42       |  |          |            |              |          |              |          |  |           |          | 92       | Γ        |  |                    |          |          | $\Box$                  | $\perp$   | П        |          | 142        | $\Box$   | Ц                    | 4        | 4        | _        | 4            | 4   | 4        |  |
|            | 43       |  |          |            |              |          |              | 匚        |  |           |          | 93       |          | 匚  |                    |          | $\Box$   | $\perp$                 | 1   | $\bot$   | <u> </u> | 143        | $\sqcup$ | $\sqcup$             | 4        | _        | 4        | $\dashv$     | +   | ┥-       |  |
|            | 44       |  |          |            |              |          |              |          |  | Ш         |          | 94       | 1        | ↓_   |                    |          | _        | _                       | 4   | $\bot$   | <u> </u> | 144        | $\sqcup$ | Н                    |          | 4        |          | 4            | +   |          |  |
|            | 45       | $\Box$   |          |            | _            | L        |              | <u> </u> | _  | Ш         |          | 95       | 4        | ┞  | $ldsymbol{\sqcup}$ | Ш        | 4        | +                       |   | 44       | ļ        | 145        | +-       | ${oldsymbol{arphi}}$ | -        | $\dashv$ | -+       | $\dashv$     | +   |          |  |
|            | 46       | ┞  | ↓_       | L.         | <u> </u>     | $\vdash$ | <del> </del> | ┞-       | <b>!</b>   | H         | <u> </u> | 96       | 1        | ⊬  | -                  | Н        |          | -                       |   | 4-4      | -        | 146        | -        | ┝╾┥                  | -        |          |          | $\dashv$     | +   | +        |  |
| <u></u>    | 47       | 1  | <b> </b> | <b> </b> _ | _            | <b>L</b> | L.           | ▙        | <b>↓</b> _                                       | Н         | -        | 97       | ┼        | ╀  | -                  | $\vdash$ |          |                         | +   | +        | -        | 147        | ┼        | ╟┤                   | -+       |          | -        | +            | +   | +-       |  |
| <b>—</b>   | 48       | ╄-   | 1        | -          | <u> </u>     |          | ⊢            | ╄-       | ╂  | H         | -        | 98       | ╁        | ╀  | <del>  -</del>     | Н        |          | -                       | +   | +        | -        | 149        |          | $\vdash$             | ᆉ        | $\dashv$ | -+       | 十            | $\dashv$  | +        |  |
| <b> </b>   | 49       | ╂  | ┼-       | -          | <del> </del> |          |              | ┼        | +  | Н         | -        | 100      | . -      | +-   | ╌                  | H        |          | -+                      | +   | ┽┥       | -        | 150        |          | $\vdash$             | ┪        | -        | -        | +            | $\dashv$  | $\dashv$ |  |
| i          | 50       | 1  | I        | l          | ı            | 1        | ı            | ł        | 1  | 1 1       | L        |          | וי וי    | 1  | 1                  | i _ l    |          | L                       | 1   |          |          | 1 130      | 1_       |                      |          |          | _        |              | _   | Ļ_       |  |